

Understanding Decisions to Suspend Works: When Employers Do Not Pay

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Abstract. The construction industry propels Malaysia's economic growth. Payment is the livelihood of the construction industry. Many contractors have suffered badly from payment issues in Malaysia, especially non-payment. To remedy non-payment, unpaid contractors have the right to suspend contracts express such rights. However, this self-help remedy is less to be instigated and the reasons remained under explored. The aims of this paper are threefold: (1) to understand contractors' reluctance to suspend works, (2) to predict contractors' decision to suspend works from the lens of Theory of Planned Behaviour (TPB) model, and (3) to propose intervention strategies based on Institutional Theory. 44 Contractors specializing in building and civil engineering works participated in this study. The results show that *Perceived obligations to others* and *tolerance factor* underpinned their reluctance. Step-wise regression analysis also shows that *subjective norm* is the predictor of intention. To intervene in the decisions effectively, the TPB model was further extended with isomorphic pressures: *Normative*, *Mimetic*, and *Coercive Pressures* by drawing on Institutional Theory. These isomorphic pressures could be useful in influencing intention through *subjective norm*. The outcome of study is beneficial for both project practitioners and researchers, especially in improving payment issues in the Malaysian construction industry. Suspension of work can be seen as one of an effective self-help remedy that can be intervened in a macro framework.

1 Introduction

Payment is the essential constituent that propels the Malaysian construction industry. The industry has been troubled with serious payment problems that seriously affect contractors' cash flow [1, 2]. This causes drawbacks not only to the key players, but also serious delay to the projects [3].

Non-payment is regarded as one of the major unethical conduct evidenced by the contractors [4]. Unpaid contractors often face the risk of bankruptcy [5]. To countenance against non-payment, unpaid contractors can choose to dispute and resolve through litigation, adjudication, mediation, or arbitration. Nevertheless, contractors have the right to remedy non-payment. Such rights include termination, summary judgment, go slow, suspension of

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works, or claim for interest. Despite the rights available, unpaid contractors would still continue working on projects without opting the route of termination [6].

Recently, construction professionals are highlighting the virtues of suspension of work as a self-help remedy as one of the avenues in remedying unpaid issues. Suspension of work gives contingencies for unpaid contractors to halt construction works lawfully until the employer duly honours the payment [7]. However, unpaid contractors are not granted any common law rights to suspend works. To suspend works, contractors have to rely on contractual express provisions. Main contracts such as Construction Industry Development Board 2000 (CIDB 2000), Pertubuhan Arkitek Malaysia 2006 (PAM 2006), and Public Works Department 203 (A) [PWD 203(A)] provide such avenues. Despite this self-help remedy, suspension of work was found to be less favourable among other avenues [5].

The study first investigated the underlying reluctance factors through cross sectional surveys. Drawing on Theory of Planned Behaviour (TPB), the study then examined the predictors of the decision to use suspension of work clause. Following that, the study recommended institutional theory as potential strategies to intervene in the use of suspension of work against non-payment.

2 Factors underpinning contractor's reluctance to suspend works

Despite the convenience of suspending works, contractors may somehow reluctant to use this provision against employer's non-payment. Early works done by [5] showed that the local contractors did not favour the right to suspend works as the best alternative remedy for securing payment debt. The possible arguments underpinning their reluctance to suspend works may include:

2.1 Absence of suspension clause

Contractors have to rely on the express provisions in construction contracts to suspend works. Contractors who suspend works without relying any express clauses in the contracts may invoke repudiatory breach.

In the case of *Kah Seng Construction Sdn Bhd vs Selsin Development Sdn Bhd*, the court held that:

"...Even if the plaintiff can establish that the defendant is in repudiatory breach of contract, the plaintiff would have no right to suspend works, but instead would have had to elect to either terminate the contract or insist on due performance. By suspending works without valid legal cause, the plaintiff has in fact repudiated its contractual obligations."

This case evidenced that the contractor is not allowed to suspend works and left with the option to terminate the contract.

Similarly, in *Canterbury Pipe Lines Ltd Vs The Christchurch Drainage Board*, the contractor has suspended works when the engineer withheld payment certificates. The court held that the contractor repudiated the contract by doing so. The virtues of relying express contractual rights to suspend works were further echoed in *Channel Tunnel Group Ltd vs Belfour Beatty Construction Ltd & others*, *DR Bradley (Cable Jointing) Ltd vs Jefco Mechanical Services*, as well as *Jia Min Building Construction Pte Ltd vs Ann Lee Pte Ltd*, where the contractor can only determine the contract in the absence of suspension clause in the contract.

Suspension of work is a breach of condition that may lead to a repudiatory breach as there is no common law that entitles the contractor to suspend works. Without express terms

and clauses of suspension of works, the contractor cannot suspend works if otherwise the contractor can be held to have breached the contract.

In Malaysia, the right to suspend works is envisaged in clause 30.7 Pertubuhan Arkitek Malaysia (PAM) 2006 and clause 42.10 CIDB 2000. Generally, the contractor's suspension of work shall lapse when the employer eventually pays the amount due including interest to the contractor. The contractor shall resume normal working as soon as is reasonably possible.

The employer can only lift the suspension period by honouring the payment with interest to the contractor. As soon as the payment is made, the contractor shall perform his contractual obligations diligently.

2.2 Lack of awareness

Knowledge and awareness of an innovation would lead to actual use through information-seeking and information-processing activities by the user [8]. Awareness is essential in achieving a viable and capable construction industry. In fact, the pace of actions towards subjugating the challenges in the construction sector heavily relies on the awareness of the significance of the corresponding actions [9]. Awareness is able to jumpstart constructive movements in the construction sector [9, 10]. Similarly, suspension of works is meaningless if the contractor himself is not aware and mindful of this right, even though this right is enshrined in the construction contracts. Without this awareness, it is almost impossible for a contractor to have interest to instigate this contractual right on the first place.

2.3 Preferences on alternative actions against non-payment

Other alternatives could be seen as more plausible in securing payment. Unpaid contractors would rely on the other alternatives such as arbitration, adjudication, mediation, winding up company, summary judgment, determination of contract, and claim for interest [11]. Avenues such as speedy dispute resolution mechanisms, interests on late payment, creation of trusts accounts for retention sums, were found to be favoured compared to suspension of works [5].

2.4 Intimidation

A contractor may be intimidated by the sub-contractor not to instigate the right to suspend works. When the sub-contract is subjected to pay-when paid clauses, the sub-contractor loses his leverage and end up for not being paid as well. For the sub-contractors, the main contractor's act of suspending works is possibly an offending action towards the employer and a must-avoid act. Therefore, it is logical to assume that the sub-contractors would profusely intimidate the contractor not to suspend works at all in the face of non-payment. Nevertheless, intimidation could have been emanated from the employer. Such unethical act warrants further investigations.

2.5 Legal challenges

Previous court case has shown that the unpaid contractors are frequently challenged on the grounds of wrongful suspension. Contractors who wrongfully suspend works might be challenged by the employer and end up determining his own employment. These potential challenges may deter a contractor's interest in deploying his right to suspend works. Nevertheless, contractors may be challenged based on the following grounds:

2.5.1 Vexatious and unreasonable notice

Suspension of works in construction is generally coined as stopping construction works before the completion of all contractual activities in the contract [12]. Although the works are suspended, all rights and obligations under the contract still remains [7]. Clause 30.7 in PAM 2006 states that:

*“Without prejudice the Contractor’s right to determine his own employment under Clause 26.0, if the Employer fails or neglects to pay the contractor the amount due as shown in the payment certificate (less any Liquidated Damages and set-off which the Employer is expressly entitled to make under the contract) and continue such default for fourteen (14) days from the receipt of a written notice delivered by hand or by registered post from the Contractor stating that if payment is not made within the fourteen (14) Days, the Contractor may by a further written notice delivered by hand or by registered post, forthwith suspend the execution of the works until such time payment is made. Provided always that **such notice shall not be given unreasonably or vexatiously**”.*

The contractor must adhere to the strict procedures by giving notice to suspend works. Submission of notice is a condition precedent to suspension of works. The contractor shall be mindful that the notice shall not be given unreasonably, or vexatiously. The Courts have defined both “unreasonable and vexatious” effectively. In *J.M Hill and Sons Ltd vs London Borough of Camden*, the court defined “unreasonable” as the act of taking advantage on the employer. In *John Jarvis vs Rockdale Housing Association Ltd*, the court defined “vexatious” as the act of ulterior motive to oppress, harass or to annoy. Followed by that, in *Reinwood Ltd v Brown & Sons Ltd*, the court defined “unreasonable” as disproportionately disadvantages the employer, and “vexatious” as the ulterior motive or purpose of oppressing, harassing or annoying the employer”.

Evidently from these cases, the notice to suspend works should free from any motive to oppress, harass, annoy, and disproportionately disadvantage the employer.

2.5.2 Absence of back to back provisions

Although the main contracts stipulate the right to suspend works, contractors should also make sure that the sub-contracts must incorporate back-to back suspension clauses. In *Chandler Bros Ltd vs Boswell*, the main contractor was not empowered by the sub-contract to remove the contractor. The court of appeal held that the main contractor was guilty of a breach of the sub-contract. Similarly, the contractor must be aware that the subcontracts itself must contain the back to back clause to enable his capability to streamline suspension to sub-contractors.

2.6 Uncertainty in loss & expense claims and extension of time

Uncertainty over the payables and entitlements in extension of time may influence contractors’ decision to suspend works. According to Sheridan [13], a contractor may be uncertain over the adequacy of compensation payable and entitlement of extension of time following his suspension of works.

Unpaid contractors who suspend works are entitled for extension of time and loss and expenses entitlement, subject to the stipulations in the contract [7]. For an example, clause 23.8 (v) PAM 2006 stipulates that if the contractor suspends his works due to non-payment, he is entitled for an extension of time. According to clause 23.1(a), if the contractor opines that suspension of work would delay the completion of works beyond the completion date, he shall issue the architect a written notice of his intention to claim for such extension of time together with an initial estimate of the extension of time he may require supported with all

causes of delay. The written notice shall be condition precedent to an entitlement of extension of time.

Nevertheless, the contractor is entitled to claim loss and expense. According to clause 24.3(m) PAM 2006, the contractor may be reimbursed with any loss and expenses if the work progress has been adversely influenced by the suspension of works. The contractor shall issue a notice to the architect for claiming loss and expenses with supporting documents such as initial estimates and causes of delays. Similarly, any contractor who suspends works under CIDB 2000 contract is entitled for extension of time [clause 42.10 (c) ii], and loss and expenses [clause 42.10(c) (iii)].

2.7 Distressing obligations

When a contractor suspends works, he is ceasing his construction works obligations until being paid by the employer. Unless the contract specifies, the contractor is entitled to leave the site in safe conditions, and the duty to insure ends with his other obligations as well. This implies that, when the contractor exercises his rights to suspend, the safety of the site is left with the employer. All problems associated with the cessation of the construction site belong to the employer [14].

However, Clause 30.9 PAM 2006 states that the contractor shall secure and protect the works during the period of suspension and ensure that there is a separate cessation insurance cover for all the risks specified in clause 19.0 (Insurance against injury to person and loss/or damage of property), clause 20. A (Insurance of new building works by the contractor), or clause 20. B (Insurance of New Building works-by the employer), or clause 20.C (Insurance of existing Building or extension-by the employer). Similarly, in CIDB 2000, the contractor who suspend works must not withdraw his entire workforce from the site, as he is obliged under clause 42.10 (c) (i) to protect and secure the works during the period of suspension.

Eventually, these obligations following suspension of work would influence contractor's interest to suspend works. When such contracts require the contractor to secure the site, the contractor has to ensure all works are protected from possible damages on the site.

In addition to that, contractors are made responsible to prevent and reduce delays. Stipulated in clause 23.6 PAM 2006, "*the contractor shall constantly use his **best endeavour** to prevent, or reduce delay in the progress of the works, and to do all that may reasonably be required to the satisfaction of the architect to prevent and reduce delay or further delay in the completion of the Works beyond the completion date*". The court held in the case of **IBM UK Ltd vs Rockware Glass Ltd** that "best endeavour" implies prudent, determined and reasonable steps which must be taken, in order to achieve the desired result.

2.8 Tolerance

Kho and Abdul Rahman [15] contended that certain contractors in Malaysia have the culture of tolerating paymaster's late payment. The contractors overall can tolerate a minimum of 3 days and a maximum of 45 days of late payment. This could imply that contractors do not instigate the right to suspend is partly due to their tolerance towards paymaster. Contractors might perceive that paymaster's non-payment would just occur once in a while and they choose to tolerate and wait. Besides that, contractors might speculate that the share price would plunge drastically in case suspension of work has been initiated. Since the employer do not repeatedly at fault and pose repeated amount of failure to pay in time, the contractors would tend to proceed with their work without suspending their works.

Besides that, contractors who find themselves capable of sustaining the current project will tend to tolerate with the employer's poor financial status. Poor financial control leads to insufficient capital [16]. Kho and Abdul Rahman [15] asserted that the causes for employer's

poor financial management include his lack of management skills, ineffective utilization of funds, improper process implementation, underestimate & overlook the ripple effect of economic downturn on cash flow, client's failure to finance to project due to lack of cash flow, and paymaster's own dilemma in bankruptcy or winding up of his own other business activities. Paymasters own crippling financial status is detrimental to the working performance, time management, and working morale in the organization. However, contractors may have other subsidiary projects that can help to complement the existing ones, and does not jeopardize any cash flows.

Also, contractors tend to tolerate and withhold their suspension so that the relationship with the paymaster can be prolonged and maintained, even in the face of non-payment. Especially in government projects, it is speculated that contractors tend to avoid possible conflicts that may put their future business at stake.

Part of contractor's tolerance could be contributed to their understanding towards bad economic situations. According to Coulter and Kelley [17], bad economic conditions cause undue distress among paymasters. Clients are unable to issue pay checks to the contractors at the end of the day due to financial difficulties. It could lead to short of current year project. Fikri Hasmori, Ismail [18] stated that short of current year project occurs mostly in government projects when the value of the work done exceeds the budget for the current year. Late payment easily occur when the releasing of corresponding funds faces impediments by the related government's agency [18]. Such repercussion would lead to non-payment by the employer.

2.9 Dispute with employer

Dispute between the employer and contractor is one of the reasons for non-payment [18]. Employers and contractors may dispute over the valuations done on site. Nevertheless, employers may hold several grounds against contractors and therefore their payment are held. Contractors in the process of negotiating with employers for dispute settlement would probably delay their intention to suspend works. The employer may hold their payment based on these grounds:

2.9.1 Invalid interim certificates

In *Gunung Bayu Sdn Bhd vs Syarikat Pembinaan Perlis Sdn Bhd*, the appellant's architect was responsible for the issuance of interim certificates. The interim certificate was argued to be invalid as the certificate was signed by a graduate architect. The appellants claimed that certificate was not valid and refused to honour the payment.

2.9.2 Fraudulent certificates

In *Ling Heng Toh Co vs Borneo Development Corporation Sdn Bhd*, the contractor contended that the payment certificate has been impartially certified under the influence of the employer. The trial judge however found that there was no fraud between the respondents and the engineers over the issuance of interim certificates.

In practice, the employer could allegedly apply the same ground for claiming that the certifier has been acting impartially under the influence of contractors, and refuse to honour the payment. In *Lazarus Estates Ltd vs Beasley*, Lord Denning stated that:

"No court in this land will allow a person to keep an advantage which he obtained by fraud. No judgment of a court, no order of a minister can be allowed to stand if it has been obtained by fraud...fraud unravels everything."

2.9.3 Inaccurate interim certificate

In *Gunung Bayu Sdn Bhd vs Syarikat Pembinaan Perlis Sdn Bhd*, the appellant's Employers can challenge the accuracy of interim certificates and refuse to pay. In *C.M Pilings & Co Ltd vs Kent Investments Ltd*, the accuracy of the interim certificate was contended by the employer, and refused to honour the payment. The court eventually held that the employer had the right to challenge the accuracy of interim certificates, and ordered a stay of the application for summary judgement for the sum certified and referred to arbitration.

2.9.4 Set-offs

Persistent attempts by the employer to rely on set-off has caused financial stress on contractors [19]. In *Token Construction Co Ltd v Charlton Estates Ltd*, the court held that deductions can be made from interim certificate if the contract expressly allows it. There are several circumstances which allow the employer to set off the payment due to the contractors. In *Woo Kam Seng vs Vong Tak Kong*, the court held that the employer was allowed to set off the amount payable to the contractor, as the contractor failed to perform in accordance to the specifications required.

In *Mahkota Technologies Sdn Bhd (Formerly known as the General Electric Co (M) Sdn Bhd vs BS Civil Engineering Sdn Bhd*, the contractors' works were argued to be defective and failed to complete the contract within the stipulated time. The court held that the employer's counterclaim eventually exceeded the plaintiff's claim for payment.

In *Kemayan Construction Sdn Bhd vs Prestara Sdn Bhd*, the court held that the respondent was entitled to withhold payment when the petitioner failed to rectify the defects according to the architect's instruction.

In Malaysia, extend of set-off was eventually dictated in PAM 2006 standard form of contract. Under the Principle of "*expressio unius est exclusion alterius*", the mechanism of set-off is distinguished from common law and is only limited to what is dictated and laid out in the standard form of contract. The employer shall not be entitled to set-off any amount unless the amount has been agreed by the contractor, or the decision has been issued by the adjudicator.

3 Framework underpinning decision making: theory of planned behaviour

Theory of Planned Behaviour (TPB) postulates that human actions are guided by behavioural/attitudinal beliefs, normative beliefs, and control beliefs on the performance of a behaviour [20]. The most proximal predictor of actual behaviour is behavioural intention (*BI*) [21, 22]. Behavioural intention (*BI*) indicates the level of effort people are willing to exert [22]. According to Sheeran, Milne [23], behavioural intention (*BI*) is the result of decision making-process.

In turn, behavioural intention (*BI*) is determined by attitude (*A*), subjective norm (*SN*), and perceived behavioural control (*PBC*) [22]. Beliefs about the likely consequences of a behaviour give rise to attitude (*A*); beliefs about normative expectations of others produce subjective norm (*SN*); while beliefs about the factors that enables or inhibits the performance of the behaviour contributes to perceived behavioural control (*PBC*) [24]. In general, the combination of attitude (*A*), subjective norm (*SN*), and perceived behavioural control (*PBC*) predicts behavioural intention (*BI*) [25]. Behavioural Intention (*BI*) in suspending works can thus be represented with the following equation:

$$\text{Behavioural Intention (BI)}_{\text{suspension of work}} = W_1 \text{Attitude}_{\text{towards suspending works}} + W_2 \text{Subjective Norm}_{\text{with regard to suspension of work}} + W_3 \text{Perceived Behavioural Control}_{\text{over the use of suspension of work}},$$

where W_1 , W_2 , and W_3 are empirically determined weights. (1)

The decision-making in the use of suspension of work when non-payment occurs is illustrated in Fig.1 below:

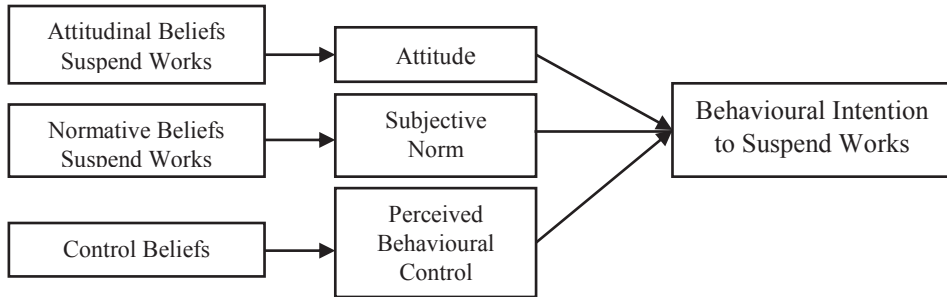


Fig. 1. Decision-Making in Suspension of Works (When Employer Fails to Pay)

It is thus reasonable to hypothesize that:

Hypothesis 1 (H₁): Attitude (*A*) towards Suspension of Work has a significant influence on Behavioural Intention (*BI*) to suspend works when non-payment occurs.

Hypothesis 2 (H₂): Subjective Norm (*SN*) with regards to suspension of work has a significant influence on Behavioural Intention (*BI*) to suspend works when non-payment occurs.

Hypothesis 3 (H₃): Perceived Behavioural Control (*PBC*) over the use of suspension of work has a significant influence on Behavioural Intention (*BI*) to suspend works when non-payment occurs.

The more favourable contractors' attitude and subjective norm towards suspension of work, and the greater perceived control towards suspending works, the stronger the contractor's intention in suspending works against non-payment.

4 Research objectives

This study has three objectives. Firstly, the study aims to investigate the factors underpinning unpaid contractors' reluctance in suspending works. Secondly, the study aims to identify the predictors that predict contractors' intention to suspend works based on Theory of Planned Behaviour (TPB). Thirdly, the study aims to intervene in the decision to suspend works with Institutional Theory.

5 Research methodology

To achieve objective 1 of the study, cross sectional survey in the form of questionnaires were administered to 1250 Grade 7 contractors specializing in building and civil engineering works in Malaysia. Grade 7 contractors are selected for this study as they have no limitation for tendering capacities and their net capital worth is the highest among the other grades (RM 750,000) [26].

The respondents were required to fill in their demographic details. Following that, the respondents would be required to rate the degree of importance of each factor which constitute to their reluctance in suspending works.

The Relative Importance Index (RII) will be calculated as such:

$$I = \frac{\sum_{i=1}^5 W_i X_i}{\sum_{i=1}^5 X_i} \tag{2}$$

i = Response category index; whereby 1=not important, 2= slightly important, 3= moderately important 4= very important, 5= extremely important

W_i = Weight assigned to i th response =1, 2, 3, 4, 5 respectively.

X_i = Frequency of the i th response given as percentage of the total responses for each factors.

To achieve objective (2), the study draws on Theory of Planned Behaviour (TPB), the contractors were asked to assess their *behavioural intention (BI) to suspend works, attitude towards suspension of works (A), subjective norm with regards to suspension of work (SN), and perceived behavioural control with regards to suspension of work (PBC)* if the employer fails to pay. The items measuring *behavioural intention (BI), attitude (A), subjective norm (SN), and perceived behavioural control (PBC)* were adopted and modified based on previous studies, e.g. Taylor and Todd [21], Ajzen and Driver [27], and Ajzen [20].

Behavioural Intention (BI) was assessed with 3 items, attitude (A) was assessed with 4 items, subjective norms (SN) was assessed with 3 items, while perceived behavioural control (PBC) was assessed with 4 items. Prior to the main survey, the constructs and items were pre-tested by 3 construction professionals (with more than 7 years of experiences). Necessary modifications were made on the constructs and items based on the expert’s recommendations. All items were assessed with Likert Scales (1- Strongly Disagree to 7- Strongly Agree). There are a total of 3 hypothesis posited in this study. They were tested with stepwise regression carried out with *Risk Simulator RS2012*.

To achieve objective 3, predictor of Behavioural intention (BI) was further extended with variables supported by Institutional Theory. The intervention framework was further proposed based on theoretical groundings of *normative, coercive, mimetic* pressures drawing on institutional theory.

6 Results and discussions: objective 1

This section presents the (i) demographic background of the respondents, and (ii) results from the survey of reluctance factors.

6.1 Demographic details

A total 44 contractors responded in the reluctance survey. The response rate was 3.52%. Understandably, the response rate was low due to the fact that the prospective respondents were sensitive towards payment issues, and not interested in providing controversial feedbacks. Overall, Table 1 shows the demographic background of the respondents.

Table 1. Demographic Background of Contractors

Description	Frequency	Percentage
Experience in Construction Industry		
Less than 2 years	2	4.5%
Between 2-4 years	5	11.4%
Between 4-6 years	6	13.6%
Between 6-8 years	4	9.1%
More than 10 years	27	61.4%

Experience of Suspending works against non-payment	3	6.8%
Amount of Non-Payment Reported (Ringgit)		
More than 30 Million	1	2.3%
10-15 Million	2	4.5%
5-9 Million	3	6.8%
1-4 Million	3	6.8%
Below 1 Million	1	2.3%
Unreported	34	77.3%
Suspension of work selected as top choice remedy (reported)	5	11.4%

Based on Table 1 above, majority of the contractors (61.4%), have more than 10 years of experience in the construction industry. 13.6% of them have 4-6 years of industry experience, followed by 9.1% with 6-8 years of experience. 4.5% of the respondents reported less than 2 years of experience in the construction field.

6.8% of the respondents (3 companies) experienced non-payment which was resolved with suspension of works. And the survey also shows a daunting level of preference on suspension of work as a mechanism against non-payment, whereby only 11.4% of the respondents (5 companies) chose suspension of work as their top choice in remedying non-payment.

When probed for the amount of non-payment occurred, 34 companies (77.3%) of the respondents left it unanswered. Notably, 2.3% (1 company) records a staggering amount of more than RM 30 Million worth of amount overdue. 4.5% (2 companies) experienced a range of RM 10-15 Million worth of payment remained unpaid. Followed by that, another 6.8% (3 companies) recorded RM 5-9 Million, and RM 1-4 Million worth of payment remained overdue respectively. Only 1 company (2.3%) reported an amount which is classified as less than 1 Million worth of payment remained owed by the paymaster.

With the virtues of relative importance index, the rankings and index for each possible factor are tabulated in Table 2 below.

Table 2. Relative Importance Index (RII) of Reluctance in Suspension of Work.

Criteria	Sub Factors		Main Factors	
	Index	Ranking	Index	Ranking
Absence of Suspension Clause				
A1. No Suspension clause	3.25	11	3.25	3
Awareness Factor			2.19	9
B1. Unaware of right	2.23	33		
B2. Do not understand the procedures	2.14	34		
Preference on other ADR			3.16	4
C1. Preference on Arbitration	3.37	6		
C2. Preference on Adjudication	3.05	15		
C3. Preference on Mediation	3.26	9		
C4. Preference on Winding up Company	2.53	29		
C5. Preference on Determining own Contract	3.02	17		
C6. Preference to Claim for Interest	3.26	10		
C7. Preference on Conciliation	3.65	3		

Intimidation			2.14	10
D1. Intimidated by paymaster	2.26	32		
D2. Intimidated by sub-contractors	2.02	35		
Legal Challenges			2.66	8
E1. Constitute Breach of Contract.	2.86	26		
E2. Notice of suspension of works is vexatious and unreasonable.	2.91	25		
E3. Losing legal cases when suspend works.	2.47	30		
E4. Faces Legal challenges when suspending works.	2.39	31		
Uncertainty			2.97	6
F.1 Uncertain over adequacy payable and EOT(Extension of Time)	2.97	21		
More Obligations			3.40	1
F'.1 More obligations preventing delay	3.32	7		
F'.2 More endeavour in mitigating losses	3.47	5		
Tolerance Factor			3.25	2
G.1 Capable of tolerate culture	2.93	24		
G.2 Wait patiently	3.18	13		
G.3 Tolerate and understand financial status	2.75	28		
G.4 Capable of negotiate and convince employer of payment	3.61	4		
G.5 Tolerate non-payment because it occurs once in a while	3.65	2		
G.6 Prevent Share price drop	2.95	22		
G.7 Maintain good relationship with paymaster	3.88	1		
G.8 Understanding of bad economic situation	3.05	16		
Contract Related Disputes			3.07	5
H.1 In the process of disputing/negotiating with employers on valuations works done	3.23	12		
H.2 Disputing accuracy and amount of payment certificate	3.30	8		
H.3 Payment was withheld on the claim of setting off.	3.07	14		
H.4 Payment was held with the claim that interim certificates were not valid.	3.02	18		
H.5. Interim Certificates were claimed to be result of impartial and fraudulent	2.80	27		
H.6. Previous interim certificate was modified with a later interim certificate	2.98	19		
Insufficient Grounds for Suspending Works			2.96	7
I.1 Absence of back to back basis to suspend sub-contractor	2.93	23		
I.2 Suspend works would cause more disputes	2.98	20		

Depicted in Table 2 above, “Maintain good relationship with paymaster” was ranked the highest (RII 3.88), followed by “Tolerate non-payment because it occurs once in a while”

(RII 3.65), and thirdly “Preference on conciliation (RII 3.65). The least prominent factor was “Intimidated by Sub-contractors” (RII 2.02), followed by “Do not Understand Procedures” (RII 2.14), and “Unaware of Right” (RII 2.23).

Overall, the most prominent influencing main factors was “More Obligations” **RII 3.40**, followed by “Tolerance Factor” **RII 3.25**, “Absence of Suspension Clause” **RII 3.25**, “Preference on other ADR” **RII 3.16**, “Contract Related Disputes” **RII 3.07**, “Uncertainty” **RII 2.97**, “Insufficient Grounds for Suspending Works” **RII 2.96**, “Intimidation by Legal Challenges” **RII 2.66**, “Awareness Factor” **RII 2.19**, “Intimidation by Employer” **RII 2.14**.

For the RII that reaches below than 3.0, it can be deduced that contractors do not find themselves uncertain of the adequacy payable and extension of time claimable, neither do they find any insufficient grounds for suspending works, or feel intimidated by legal challenges, employer, and subcontractors.

7 Results and discussions: objective 2

This section presents the results of step-wise regression in order to determine the predictors of intention. Prior to the hypotheses tests, Cronbach’s alpha was used to test the internal consistency of the set of items measuring the constructs depicted in the model. The results showed that all Cronbach’s alpha value exceeds the value of 0.7, indicating that the internal consistency was met and guaranteed.

Next, all three hypotheses were tested with multiple regression analysis. Table 3 below shows the step-wise multiple regression analysis by Risk Simulator RS 2012. Stepwise regression was utilised in this study, as the combination of both forward and backward selection strategies of this technique assures parsimony of the model in predicting intention. Depicted in Table 3 below, the R-Squared or Coefficient of Determination indicates that 0.46 of the variation in “Intention to suspend works” can be explained and accounted for by the independent variables in this regression analysis. However, in a multiple regression, the Adjusted R-Squared takes into account the existence of additional independent variables or regressors and adjusts this R-Squared value to a more accurate view of the regression’s explanatory power. Hence, only 0.41 of the variation in the “Intention to suspend works” can be explained by the regressors.

Table 3. Step-Wise Multiple Regression Analysis

Regression Statistics				
R-Squared (Coefficient of Determination)	0.4565			
Adjusted R-Squared	0.4136			
Multiple R (Multiple Correlation Coefficient)	0.6756			
Standard Error of the Estimates (SE_y)	1.1325			
Number of Observations	42			
Regression Results	Intercept	Attitude (A)	Subjective Norms (SN)	Perceived Behavioural Control (PBC)
Coefficients	0.2825	0.1983	0.4806	0.2460
Standard Error	0.8419	0.1406	0.1719	0.2125
t-Statistic	0.3355	1.4102	2.7962	1.1574
p-Value	0.7391	0.1666	0.0081	0.2543
Lower 5%	-1.4219	-0.0864	0.1327	-0.1843
Upper 95%	1.9868	0.4830	0.8286	0.6762

Notably, based on the report generated by Risk Simulator software, the multiple Correlation Coefficients (Multiple R) measure the correlation between the actual dependent variable (Y) and the estimated or fitted (Y) based on the regression equation. This is also the square root of the Coefficient of Determination (R-Squared). The Coefficients provide the estimated regression intercept and slopes. For instance, the coefficients are estimates of the true; population b values in the following regression equation $Y = b_0 + b_1X_1 + b_2X_2 + \dots + b_nX_n$. The Coefficient (0.4806) with the p-Values bolded 0.0081 indicate that it is statistically significant at the 90% confidence or 0.10 alpha levels. Hence this means that Behavioural intention (BI) to suspend works can be explained by subjective norm (SN), while attitude (A) and perceived behavioural control (PBC) have to be discarded from the equation. Hypothesis 2 (H2) is supported, while Hypothesis 1 & 3 (H1 and H3) are rejected.

Table 4 shows the analysis of variance (ANOVA). It provides an F-test of the regression model's overall statistical significance. The larger the F-Statistic, the more significant the model. If the p-Value is smaller than the 0.01, 0.05, or 0.10 alpha significance, then the regression is significant. The same approach can be applied to the F-Statistic by comparing the calculated F-Statistic with the critical F values at various significance levels. In summary, Behavioural Intention (BI) to suspend works = 0.4806 Subjective Norm (SN) + 0.2825.

Table 4. Analysis of Variance

Analysis of Variance						
	Sums of Squares	Mean of Squares	F-Statistic	p-Value	Hypothesis Test	Value
Regression	40.93	13.64	10.64	0.0000	Critical F-Statistic (99% confidence with df of 3 and 38)	4.3430
Residual	48.74	1.28			Critical F-statistic (95% confidence with df of 3 and 38)	2.8517
Total	89.67				Critical F-statistic (95% confidence with df of 3 and 38)	2.2339

8 Results and discussions: objective 3

Based on the supported hypothesis (Objective 2), this section presents the development of a framework to intervene in the use of suspension of work when non-payment occurs. The proposed framework draws on Institutional Theory. Institutional theory posits that organizations tend to structure and behave in accordance to institutional environment [28]. Three types of isomorphic pressures influence organisational behaviour, namely *coercive*, *mimetic*, and *normative* pressures. Coercive pressures stem from formal regulations and mandates; mimetic pressures stem from the need to imitate and benchmark successful organizations; while normative pressures derives from professionalization, where expectations are diffused through shared norms within professional bodies [29, 30].

Regression analysis shows that subjective norm is the only factor that influence contractors' decision to suspend works when non-payment occurs. Subjective norm stem from motivation to comply with the perceptions of others who are significant to the decision maker [31]. To encourage compliance, subjective norm can be intervened through isomorphic coercive, normative, and mimetic pressures.

Legal professionals, and regulatory bodies could nevertheless make suspension of work as a legislative right when employers did not pay. Coercive pressures through the epitome of regulatory forces are capable of influencing users' perceptions of compliance to suspend works. When motivation to comply these regulatory bodies are strong, unpaid contractors would have higher intention to suspend works when non-payment occurs.

Nevertheless, professional associations in the Malaysian construction industry such as the Construction Industry Development Board (CIDB), Masters of Builders Association Malaysia (MBAM), and professional bodies such as Board of Engineers, Architects, and Surveyors could play their role in disseminating the do's and don'ts in suspending works against non-payment. Universities could play their role as well. Through education, professional consultations, and academic conferences, this right can be reached and diffused to a wider audience effectively. Diffusion is possible when users encapsulate these right through shared norms and expectations. The intervention framework is shown in Figure 2 below:

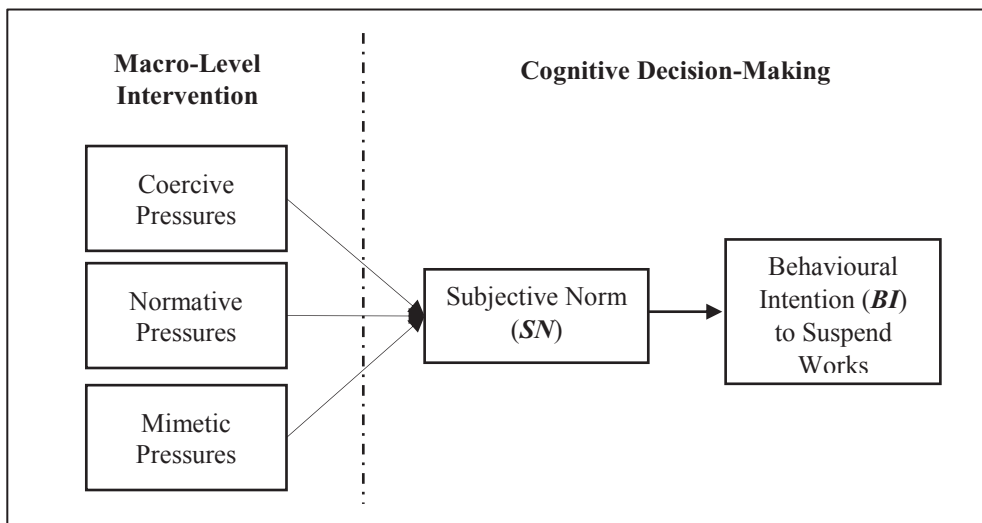


Fig. 2. Intervention Framework

9 Conclusion

Suspension of work has been regarded as a self-help remedy against non-payment. Construction professionals have been promoting this avenue to countenance against non-payment. However, there is no common law that allows unpaid contractor to walk away from site when the employer fails to pay. To suspend works without facing the risk of repudiating the contract, unpaid contractors can only rely expressed contract provisions. Despite the virtues of this right, previous studies however found that this right to be less preferred and instigated.

To overall improve the use of suspension of work, this paper has three objectives. Firstly, this paper identified the factors influencing unpaid contractors' decision-making. Drawing on theory of planned behaviour, step-wise regression analysis shows that subjective norm (*SN*) has a significant positive influence on intention. Thirdly, the paper proposed an intervention framework by drawing on Institutional theory. Coercive, normative and mimetic pressures was conceptualized to influence intention through subjective norm. Macro

intervening factors (coercive, normative and mimetic) could influence micro-level of decision making process. This study is not without its limitations. Future studies can seek to explore the relationship between intention and actual use behaviour. Secondly, the influence of macro forces on behavioural intention can be further investigated. Nevertheless, the effectiveness level of this clause could be explored, following the enforcement of the CIPAA 2012 (Construction Industry Payment and Adjudication Act 2012) in Malaysia.

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